- H. Types of Equipment to be Physically or Virtually Collocated.
 - 1. SWBT agrees to allow collocation of all equipment used and useful for interconnection or access to unbundled network elements, regardless of whether such equipment includes a switching functionality, provides enhanced services capabilities, or offers other functionalities. SWBT will permit the collocation of equipment such as DSLAMs, routers, ATM multiplexers, and remote switching modules in SWBT "eligible structures." SWBT may not place any limitations on the ability of CLECs to use all the features, functions, and capabilities of collocated equipment, including but not limited to, switching and routing features and functions. SWBT may deny the collocation of equipment that is not necessary for either access to unbundled network elements or for interconnection, such as equipment used exclusively for switching or enhanced services. The collocating CLEC will certify in writing to SWBT that the equipment is used and useful for interconnection or access to unbundled network elements. (FCC – Paras. 28-30)
 - 2. SWBT will require that all equipment to be collocated in SWBT's "eligible structures" meets NEBS Level 1 safety requirements. but SWBT may not impose safety requirements on the CLECs that are more stringent than the safety requirements it imposes on its own equipment. (FCC Para. 36)
 - 3. SWBT may not deny collocation of CLEC equipment because the equipment fails to meet NEBS reliability standards. (FCC Para. 35)
- In each application for collocation, the CLEC shall submit a prioritized list of its preferred methods of collocating, consistent with the options outlined in Section I.D. In responding to such a request, SWBT shall advise the CLEC which of its preferred types of collocation is available and provide a price quote within the time interval defined in the tariff.

J. SWBT agrees to conform its Technical Publication(s) on Collocation to this agreement and to the amended tariffs within 45 days of Commission approval of the amended tariffs, and to submit the revised Technical Publication(s) to the Commission for approval prior to publication.

II. Provision of Unbundled Network Elements

- A. Except as modified below, SWBT agrees to make all unbundled network elements (UNEs) set forth in the AT&T Interconnection Agreement available for the term of the Proposed Interconnection Agreement.
- B. SWBT will, except as provided in this section, continue to provide combinations of network elements consistent with its obligations in the AT&T Interconnection Agreement at the applicable charges set forth in the AT&T Interconnection Agreement. For preexisting combined elements, SWBT will not apply a Central Office Access Charge but will apply all other recurring and nonrecurring charges and the electronic service order charge. For combinations requiring work by SWBT, the applicable recurring and nonrecurring charges will apply together with the Central Office Access Charge.
- C. **For service to business customers,** beginning two years after the Commission approves the Proposed Interconnection Agreement:
 - 1. If the FCC or the Commission determines or has determined that a certain network element need not be provided under Section 251(c)(3) of the FTA, either statewide or in a particular location or locations, SWBT may set the price of such network element(s) at a market level for the applicable areas.
 - 2. If the FCC or a court modifies or has modified the TELRIC methodology applicable to unbundled network elements, SWBT may renegotiate the applicable prices for unbundled network elements provided pursuant to Section 251(c)(3).

- 3. In those SWBT central offices where there are four (4) or more CLECs collocated for which SWBT has provided UNEs, SWBT may elect to not combine UNEs that are not already combined in that central office. In that event, SWBT will request that all CLECs provide a one (1) year forecast of their expected demand for UNEs in that central office which each CLEC will combine outside of its existing or planned collocation arrangements. Within sixty (60) days of receipt of a CLEC's forecast, SWBT will construct a secured frame room in the central office or, if space is not available, external cross connect cabinet until space becomes available in the central office at no additional cost to the CLEC where the CLEC may combine UNEs. If a CLEC submits such a forecast, SWBT will continue to combine UNEs until the secured frame room or external cross connect cabinet is made available to the CLEC. However, if at any time after a secured frame room or external cross connect cabinet is made available. SWBT is unable to meet a CLEC's forecasted demand for UNEs to be combined through use of these arrangements due to a lack of capacity, SWBT will resume combining UNEs for that CLEC until capacity can be provided. If a CLEC fails to submit such a forecast, SWBT will no longer combine UNEs that are not already combined.
- 4. SWBT may not substitute the above described methods of combining UNEs for its own continued performance of such connections at cost based rates if the FCC or reviewing court has determined that the ILECs have an obligation to perform such connections.
- D. **For service to residential customers**, beginning three years after the Commission approves the Proposed Interconnection Agreement:
 - 1. If the FCC or the Commission determines that a certain network element need not be provided under Section 251(c)(3) of the FTA, either statewide or in a particular location or locations, SWBT may set the price of such network element(s) at a market level for the applicable

- areas. In pricing the unbundled network element platform under this provision, SWBT shall not increase the total price of the platform by more than twenty (20) percent each year.
- 2. If the FCC or a court modifies or has modified the TELRIC methodology applicable to unbundled network elements. SWBT may renegotiate the applicable prices for those unbundled network elements provided pursuant to Section 251(c)(3).
- E. To the extent the FCC by rule or the Commission by arbitration, authorizes new unbundled network elements, SWBT will provide such elements, consistent with the terms of this Section, pursuant to a negotiated or arbitrated appendix to the Proposed Interconnection Agreement.
- F. Consistent with its obligations under the AT&T Interconnection Agreement and this Section, SWBT will provide dark fiber as an unbundled network element subject to the provisions of Section II.C.
- G. Enhanced Extended Loop (EEL)

Consistent with Sections II. C.1. and 2. and II. D. 1. and 2. above:

1. SWBT agrees to combine unbundled loops with unbundled dedicated transport as described herein to provide enhanced extended loop. SWBT will cross-connect unbundled 2 or 4-wire analog or 2-wire digital loops to unbundled voice grade/DS0, DS1, or DS3 dedicated transport facilities (DS0 dedicated transport is only available between SWBT central offices) for the CLEC's provision of circuit switched or packet switched telephone exchange service to the CLECs' own end-user customers. SWBT will also cross-connect unbundled 4-wire digital loops to unbundled DS1, or DS3 dedicated transport facilities for the CLEC's provision of circuit switched telephone exchange service to the CLECs' own end-user customers.

- 2. The dedicated transport facility will extend from the CLEC customer's SWBT serving wire center to either the CLEC's collocation cage in a different SWBT central office (in which case, no dedicated transport entrance facility necessary) or to the CLEC's point of access through a dedicated transport entrance facility. CLECs must order the dedicated transport facility, with any multiplexing, from the CLEC's collocation cage or the CLEC's switch location to the wire center serving the CLEC's end user customer. The CLEC will order each loop as needed and provide SWBT with the Channel Facility Assignment (CFA) to the dedicated transport.
- 3. Alternatively, a CLEC may cross-connect unbundled loops with the unbundled dedicated transport facilities in its physical collocation space utilizing its own equipment or through the secured frame room in the central office, or if space is not available, in an external cross-connect cabinet until space becomes available in the central office. CLECs wishing to use this option will provide a rolling 12 month forecast, updated every six (6) months, of their expected demand for unbundled loops to be connected with the unbundled dedicated transport facilities in each central office in which the CLEC will combine outside of its existing or planned collocation arrangements. Within sixty (60) days of receipt of a CLEC's forecast for a given central office, SWBT will construct, at no additional cost to the CLEC, a secured frame room in the central office, or, if space is not available, external cross connect cabinet until space becomes available in the central office, where the CLEC may combine unbundled loops with the unbundled dedicated transport facilities. If a CLEC submits such a forecast, SWBT will temporarily combine unbundled loops with the unbundled dedicated transport facilities until the secured frame room or external cross connect cabinet is made available to the CLEC. When the secured frame room or external cross connect cabinet is made available, the CLEC will, within ninety (90) days after providing a forecast for a particular central office or thirty (30) days after receiving appropriate terminal assignment information

to place connections on the secured frame, whichever is later, replace the temporary connections made by SWBT, effectively half-tapping the existing temporary connections so that the temporary connection can be removed without interrupting the end user's service. When notified by the CLEC that its connections are complete within the period described above, SWBT will remove its temporary connections. If the CLEC fails to notify SWBT that it has placed its connections on the secured frame during that period, SWBT will charge the CLEC the applicable special access recurring and nonrecurring rates, in lieu of the UNE rates. Such special access charges shall be retroactive to the date SWBT began combining the UNEs for the CLEC pursuant to this paragraph. If at any time after a secured frame room or external cross connect cabinet is made available, SWBT is unable to meet a CLEC's forecasted demand for use of these arrangements due to a lack of capacity, SWBT will again temporarily combine unbundled loops with the unbundled dedicated transport facilities as an interim arrangement for that CLEC until capacity can be provided. When capacity is made available, temporary connections performed by SWBT will be removed as described above.

If a CLEC submits forecasts pursuant to this section, and fails to meet fifty percent (50%) of its submitted forecast for any central office, such CLEC will pay SWBT the reasonable costs associated with the unused capacity of the secured frame for that office.

H. The Proposed Interconnection Agreement will provide that for purposes of this Section and, for the time period(s) specified in this Section, SWBT agrees to waive the right to assert that it need not provide pursuant to the "necessary and impair" standards of Section 251(d)(2), a network element now available under the terms of the AT&T Interconnection Agreement and/or its rights with regard to the combination of any such network elements that are already assembled. Except as provided in subsection (E) above, any CLEC wishing to "opt into" the UNE provisions of the Proposed Interconnection

Agreement agrees that the UNE provisions of the Proposed Interconnection Agreement are non-severable and "legitimately related" for purposes of Section 252(i). Accordingly, any requesting CLEC agrees to take the UNE provisions of the Proposed Interconnection Agreement in their entirety, without change, alteration or modification, waiving its rights to "pick and choose" UNE provisions from other agreements under Section 252(i). This mutual waiver of rights by the parties will constitute additional consideration for the Proposed Interconnection Agreement.

SWBT's agreement as set out above is expressly conditioned on a finding by the Commission that the UNE provisions of the Proposed Interconnection Agreement are non-severable and "legitimately related" for purposes of Section 252(i).

Any CLEC that does not wish to take the UNE provisions of the Proposed Interconnection Agreement may exercise its rights under Section 252(i) to "opt into" other "legitimately related" sections or portions of the Proposed Interconnection Agreement

III. Appeals

- A. SWBT agrees to dismiss with prejudice its appeal SWBT v. AT&T and the Public Utility Commission of Texas, Case Nos. 98-51005, 99-50060, and 99-50073, U.S. Court of Appeals, Fifth Circuit.
- B. SWBT will remove the protest language from the Physical and Virtual Collocation Tariffs. SWBT will not include any protest language in the Proposed Interconnection Agreement.
- C. SWBT reserves all rights to contest any order or decision requiring the payment of reciprocal compensation for ISP traffic, including the right to seek refunds or to implement a new system of reciprocal compensation, pursuant to regulatory or judicial approval.
- D. SWBT reserves the right to appeal any state or federal regulatory decision, but, absent a stay or reversal, will comply with any such final decision as expressly set forth herein.

E. Nothing in this Agreement limits SWBT's right or ability to participate in any proceedings regarding the proper interpretation and/or application of the FTA.

IV. Reciprocal Compensation

The Proposed Interconnection Agreement will provide the following options for reciprocal compensation:

- A. A CLEC may "MFN" into the reciprocal compensation arrangements contained in the existing AT&T interconnection agreement for the life of that agreement.
- B. A CLEC may elect either of the following:
 - 1. SWBT offers and a CLEC may elect, subject to mutually agreeable audit provisions, a reciprocal compensation arrangement for the transport and termination of local wireline traffic based upon a bill and keep arrangement and a meet point billing arrangement for ISP traffic, or in the alternative;
 - 2. A CLEC may elect to negotiate, and if necessary submit for arbitration, alternative reciprocal compensation arrangements for the transport and termination of local wireline traffic and ISP traffic as allowed by federal law.

V. xDSL-Based and Other Advanced Services Technology ("Loop Technologies")

A. For loop technologies that comply with existing industry standards will be presumed acceptable for deployment, including: T1.601, T1.413, and TR28. Additionally any loop technology specifically approved by the FCC or any state regulatory commission; a technology approved by an industry standards body; a technology which has been successfully deployed by any carrier without significantly degrading the performance of other services will be presumed acceptable for deployment.

- 1. The term "significantly degrade" means noticeable impairment of service from a user's perspective. The Commission shall determine whether a technology significantly degrades the performance of other services. As industry standards are ratified for new technologies, such technologies will be presumed acceptable for deployment.
- 2. CLECs wishing to introduce a technology that has been approved by another state commission, or successfully deployed elsewhere will provide documentation to SWBT and the Commission before or coincident with their request to deploy such technology. Documentation should include the date of state approval or deployment of the technology, any limitations included in its deployment, and proof that deployment did not significantly degrade the performance of other services.
- B. SWBT shall not deny a carrier's request to deploy any of the loop technologies listed in paragraph A. above unless it has demonstrated to the Commission that the CLEC's deployment of its loop technology will significantly degrade the performance of other advanced services or traditional voice band services. In the event SWBT rejects a CLEC request for provisioning of advanced services, SWBT must disclose to the requesting carrier information with respect to the rejection, together with the specific reason for the rejection.
- C. For a twelve-month period commencing on the date of Commission approval of the Proposed Interconnection Agreement, a CLEC may order loops for the provision of service other than those listed in Paragraph A. above on a trial basis without the need to make any showing to the Commission. Each technology trial will not be deemed successful until it has been deployed without significant degradation for 12 months or until national standards have been established, whichever occurs first. A CLEC that provisions loop technologies described in this Section shall assume full and sole responsibility for any damage, service interruption or other telecommunications service degradation effects and will indemnify SWBT for any damages to SWBT's facilities, as well

as any other claims for damages, including but not limited to direct, indirect or consequential damages made upon SWBT by telecommunications provider of anv telecommunications user (other than any claim for damages or losses alleged by an end-user of SWBT for which SWBT shall have sole responsibility and liability), when such arises out of, or results from, the use of such loop technologies, described in this Section C. Further, the CLEC agrees that it will undertake to defend SWBT against and assume payment for all costs or judgments arising out of any such claims made against SWBT resulting from the provisioning of services under this Section C. SWBT shall provide the same indemnification should it provide services under Section C.

The CLEC deploying loop technology pursuant to this Section, as well as any CLEC opting into the "Proposed Interconnection Agreement," agrees not to contend in any other state that the loop technology deployed on a trial basis pursuant to this Section has been "successfully deployed" as that term is used in paragraph 67 of FCC 99-48.

- D. One year from date of Commission approval of the Proposed Interconnection Agreement for deployment of loop technologies other than those listed in paragraph A. above, SWBT will not deny a requesting CLEC's right to deploy a new loop technology if the requesting CLEC can demonstrate to the Commission that the loop technology will not significantly degrade the performance of other advanced services or traditional voice band services. (FCC 99-48 Para. 69)
- E. SWBT will not guarantee that the local loop ordered will perform as desired by the CLEC for XDSL-based or other advanced services, but will guarantee basic metallic loop parameters including continuity, and pair balance.
- F. SWBT will assign loops so as to minimize interference between and among advanced services, including xDSL-based services, and other services. In all cases, SWBT will manage spectrum in a competitively neutral manner consistent with all relevant industry standards.

- G. With respect to loop technologies included in paragraphs A, C and D above, and to the extent no national industry standards for spectrum management for these loop technologies have been issued, SWBT, CLECs and the Commission shall jointly establish long-term competitively neutral spectral compatibility standards and spectrum management rules and practices so that all carriers know the rules for loop technology deployment. The standards, rules and practices shall be developed to maximize the deployment of new technologies within binder groups while minimizing interference, and shall be forwardlooking and able to evolve over time to encourage innovation and deployment of advanced services. These standards to be used until such time as [national] industry standards exist. CLECs that offer xDSL-based service consistent with mutually agreed-upon standards developed by the industry in conjunction with the Commission, or by the Commission in the absence of industry agreement, may order local loops based on agreed-to performance characteristics. SWBT will assign the local loop consistent with the agreed-to spectrum management standards.
- H. Within a reasonable period of time after general availability of equipment conforming to industry standards or the mutually agreed upon standards developed by the industry in conjunction with the Commission, a CLEC or SWBT providing non-standard xDSL or other advanced service must bring its service and equipment into compliance with the standard at its own expense.
- If SWBT or another CLEC claims that a service is significantly degrading the performance of other advanced services or traditional voice band services, then SWBT or that other CLEC must notify the causing carrier and allow that carrier a reasonable opportunity to correct the problem. Any claims of network harm must be supported with specific and verifiable supporting information. In the event that SWBT or a CLEC demonstrates to the Commission that a deployed technology is significantly degrading the performance of other advanced services or traditional voice band services, the carrier deploying the technology shall discontinue deployment of that technology

- and migrate its customers to technologies that will not significantly degrade the performance of other such services.
- J. SWBT agrees that as a part of spectrum management it will maintain an inventory of the existing services provisioned on the cable, and manage the spectrum in a non-discriminatory manner regardless of whether the service is provided by a CLEC or by SWBT. SWBT agrees that where disputes arise, it will put forth a good faith effort to resolve such disputes in a timely manner. As a part of the dispute resolution process SWBT concurs that it will disclose information as detailed in paragraph 2 below so that the involved parties may examine the deployment of services within the affected loop plant. [FCC 99-48 Para 73]
 - 1. For xDSL-based and other advanced services technologies, a CLEC will advise SWBT of the type of specific technology(ies) (including PSD masks) the CLEC intends to provision over an unbundled SWBT loop.
 - 2. SWBT will disclose within 3 to 5 business days to a requesting CLEC information with respect to the number of loops using advanced services technology within the binder group and the type of technology deployed on those loops.
- K. Effective April 4, 1999, SWBT began providing mechanized access to a loop length indicator for use with xDSL-based or other advanced services in specific SWBT wire centers via enhancements to Verigate and Datagate upon a request by a CLEC which is collocated or has ordered collocation in a wire center and has advised SWBT of its intent to order DSL capable loops. This information, available through Verigate and Datagate, is an indication of the approximate loop length, based on a 26 gauge equivalent and calculated on the basis of Distribution Area distance from the central office.
- L. To the extent SWBT is technically able to access the following in its retail operations, SWBT will develop and deploy mechanized and integrated Operations Support Systems that will permit: (1) real-time CLEC access through an electronic

gateway to a database that contains the loop makeup information; (2) mechanized, flow-through ordering, loop design, and provisioning for any xDSL loop type listed in the table above. SWBT, the Commission and CLECs shall jointly pursue, in a timely manner, an industry standard mechanized OSS solution to accessing loop qualification data. (271 approval is not contingent upon completion of this mechanized ordering OSS feature).

- M. SWBT shall provision and install CLEC loops at an interval that is at parity with the actual intervals achieved by SWBT retail or its affiliates.
- N. In the event that the FCC or the industry establishes long-term standards and practices and policies relating to spectrum compatibility and spectrum management that differ from those established pursuant to paragraph D. above, SWBT agrees to comply with the FCC and/or industry standards and practices and policies.

VI. MLT Testing

SWBT agrees to provide access to MLT testing to allow CLECs to test their end users' lines for which SWBT combines UNEs, for CLECs that combine UNEs they obtain from SWBT, and for CLECs that resell SWBT services as follows:

- A. On January 1, 1998 and January 1, 1997, respectively, SWBT made available MLT testing functionality through SWBT's Toolbar Trouble Administration to allow CLECs to test their end-user lines for which SWBT combines POTS-like UNEs (analog line side port and 2-wire 8db analog loop) purchased by CLEC from SWBT and CLEC's that resell SWBT POTS services.
- B. By March 31, 1999, SWBT will make MLT testing functionality available through its Toolbar Trouble Administration to allow CLECs to test their end user lines for CLEC's that combine POTS-like UNEs (analog line side port and 2-wire 8db analog loop) purchased from SWBT.

VII. Performance Measurements

- A. 20 days prior to its filing with the FCC for interLATA authority under Section 271, SWBT will provide three months of validated data where the sample size is 10 or greater for each reported measurement per CLEC per month, that is collected and reported on a disaggregated basis for all the performance measurements established by the Commission in Project No. 16251, with the exception of those performance measures established after 1-1-99 and those which require new systems or modification of existing systems such as NXX and 911.
- B. 90% of the validated Tier-2 performance measurement results where the sample size is 10 or greater for each reported measurement per month aggregated for all CLECs should demonstrate parity or compliance with the associated benchmark for two months of the relevant three-month period. However, SWBT will not be responsible for CLEC acts or omissions that caused performance measures to be missed, e.g., accumulation and submission of orders at unreasonable quantities or times, and SWBT shall have the opportunity to present proof of such CLEC acts or omissions.
- C. SWBT agrees to the Performance Remedy Plan established in the collaborative process which is attached as Schedules 1, 2 and 3.
- D. The Commission will resolve the following issues as noted:
 - 1. The business rules for the Commission-approved performance measures will be completed by May 31, 1999 in Project 16251.
 - 2. Performance measure No. 2 for EDI pre-ordering and data validation for the performance measures will be addressed in Docket No. 20000, consistent with the time frames in that Docket.
 - 3. Performance measurements for xDSL will be finalized within 30 days after the Arbitrators' award in Docket Nos. 20226 and 20272 currently pending before the Commission.

- E. It is the intention of the parties that no later than two years after SWBT or its affiliate receives Section 271 relief, the number of performance measures subject to damages and assessments should be reduced by at least 50%.
- F. SWBT will not be liable for the payment of either Tier 1 damages or Tier 2 assessments until the Commission approves the Proposed Interconnection Agreement between a CLEC and SWBT. Tier 2 assessments will only be paid on the aggregate performance for CLECs that are operating under the Proposed Interconnection Agreement.
- G. SWBT agrees with the revised performance measure standards for FOCs (Nos. 5 and 6); LNP (Nos. 1–11); Trunk Blockage (Nos. 70-71); and Trunk Measurements (Nos. 75 and 78); attached hereto as Schedule 4.
- H. In addition to the provisions set forth in the Performance Remedy Plan, SWBT shall not be obligated to pay liquidated damages or assessments for noncompliance with a performance measure if the Commission finds such noncompliance was the result of an act or omission by a CLEC that is in bad faith, for example, unreasonably holding orders and/or applications and "dumping" such orders or applications in unreasonably large batches, at or near the close of a business day, on a Friday evening or prior to a holiday, or unreasonably failing to timely provide forecasts to SWBT for services or facilities when such forecasts are required to reasonably provide such services or facilities; or non-SWBT Y2K problems.

VIII. Additional Agreement Terms

A. SWBT has no obligation to implement the commitments set forth in this Memorandum unless the Commission finds that the terms and conditions of the Proposed Interconnection Agreement, when executed, meets the requirements of Section 271(c), conditioned only on the completion of Project No. 20000. Further, if the FCC rejects SWBT's 271 Application, or fails to approve SWBT's application by January 1, 2000, the commitments made in this Memorandum will be enforceable

- only for one-year from the date the Commission approves the Proposed Interconnection Agreement.
- B. Upon the FCC's approval of SWBT's 271 Application, the oneyear term of the Proposed Interconnection Agreement will be automatically extended for an additional period of three years subject to the provisions of Section II (C) and (D), and Section III (C) and (D) of this Memorandum.
- C. SWBT agrees not to challenge the contractual commitments incorporating the terms and conditions of this Memorandum. To the extent that any other party or entity challenges the lawfulness of any provision of this Memorandum and a court determines that one or more provisions are unlawful, then this Memorandum and any contractual and regulatory commitments made pursuant to this Memorandum are null and void. In that event, the parties will have a period not to exceed 135 days in which to negotiate a replacement interconnection agreement.
- D. Along with the Proposed Interconnection Agreement, SWBT will file a document explaining its Section 252(i) "MFN" policy, outlining the sections or portions of the Proposed Interconnection Agreement that are "legitimately related" for purposes of allowing a CLEC to obtain access to any individual interconnection, service or network element available under the Proposed Interconnection Agreement.

SWBT agrees with this two-tiered enforcement structure for performance measurements. The Commission approved performance measurements identify the measurements that belong to Tier-1 or Tier-2 categories, which are further, identified as the High, Low and Medium groups as those terms are used below and shown in Schedule-2.

SWBT concurs that the use of a statistical test, namely the modified "Z-test," for the difference between the two means (SWBT and CLEC) or two percentages, or the difference in the two proportions is appropriate for determining parity. SWBT agrees that the modified Z-tests as outlined below are the appropriate statistical tests for the determination of parity when the result for SWBT and the CLEC are compared. The modified Z-tests are applicable if the number of data points are greater than 30 for a given measurement. In cases where benchmarks are established, the determination of compliance is through the comparison of the measured performance delivered to the CLEC and the applicable benchmark. For testing compliance for measures for which the number of data points are 29 or less, although the use of permutation tests as outlined below is appropriate comparison of performance delivered to CLECs with SWBT performance as described in Alternative-1 under the "Qualifications to use Z-Test" heading below is preferred.

SWBT concurs that the definition of performance measure parity should be that the parity exists when the measured results in a single month (whether in the form of means, percents, or proportions) for the same measurement, at equivalent disaggregation, for both SWBT and CLEC are used to calculate a Z-test statistic and the resulting value is no greater than the critical Z-value as reflected in the Critical Z-statistic table shown below.

Z-Test:

SWBT agrees with the following formulae for determining parity using Z-Test:

For Measurement results that are expressed as Averages or Means:

$$\begin{split} &z = (\text{DIFF}) \, / \, \delta_{\text{DIFF}} \\ &\text{Where;} \\ &\text{DIFF} = M_{\text{ILEC}} - M_{\text{CLEC}} \\ &M_{\text{ILEC}} = \text{ILEC Average} \\ &M_{\text{CLEC}} = \text{CLEC Average} \\ &\delta_{\text{DIFF}} = \text{SQRT} \left[\delta_{\text{ILEC}}^2 \, \left(1 / \, n_{\text{CLEC}} + 1 / \, n_{\text{ILEC}} \right) \right] \\ &\delta_{\text{ILEC}}^2 = \text{Calculated variance for ILEC.} \\ &n_{\text{ILEC}} = \text{number of observations or samples used in ILEC measurement} \\ &n_{\text{CLEC}} = \text{number of observations or samples used in CLEC measurement} \end{split}$$

For Measurement results that are expressed as Percentages or Proportions:

Step 1:

$$\rho = \frac{(n_{\text{ILEC}}P_{\text{ILEC}} + n_{\text{CLEC}}P_{\text{CLEC}})}{n_{\text{ILEC}} + n_{\text{CLEC}}}$$

<u>Step 2</u>:

$$\sigma_{\text{PII.EC-PCLEC}} = \text{sqrt}[[\rho(1-\rho)]/n_{\text{II.EC}} + [\rho(1-\rho)]/n_{\text{CLEC}}]$$

<u>Step 3</u>:

$$Z = (P_{\text{ILEC}} - P_{\text{CLEC}}) / \sigma_{\text{PILEC-PCLEC}}$$

Where: n = Number of Observations P = Percentage or Proportion

Schedule-1

Performance Remedy Plan

For Measurement results that are expressed as Rates or Ratio:

$$z = (DIFF) / \delta_{DIFF}$$
Where;
$$DIFF = R_{ILEC} - R_{CLEC}$$

$$R_{ILEC} = num_{ILEC} / denom_{ILEC}$$

$$R_{CLEC} = num_{CLEC} / denom_{CLEC}$$

$$\delta_{DIFF} = SQRT \left[R_{ILEC} \left(1 / denom_{CLEC} + 1 / denom_{ILEC} \right) \right]$$

Qualifications to use Z-Test:

The proposed Z- tests are applicable to reported measurements that contain 30 or more data points.

In calculating the difference between the performances the formula proposed above applies when a larger CLEC value indicates a higher quality of performance. In cases where a smaller CLEC value indicates a higher quality of performance the order of subtraction should be reversed (i.e., $M_{CLEC} - M_{ILEC}$, $P_{CLEC} - P_{ILEC}$, $R_{CLEC} - R_{ILEC}$).

For measurements where the applicable performance criterion is a benchmark rather than parity performance compliance will be determined by setting the denominator of the Z-test formula as one in calculating the Z-statistic.

For measurements where the performance delivered to CLEC is compared to SWBT performance and for which the number of data points are 29 or less, SWBT agrees to application of the following alternatives for compliance.

Alternative 1: (preferred)

1. For measurements that are expressed as averages, performance delivered to a CLEC for each observation shall not exceed the ILEC averages plus the applicable critical Z-value. If the CLEC's performance is outside the ILEC average plus the critical Z-value and it is the second consecutive month, SWBT can utilize the Z-test as applicable for sample sizes 30 or greater or the permutation test to provide evidence of parity. If SWBT uses the Z-test for samples under 30, the CLEC can independently perform the permutation test to validate SWBT's results.

2. For measurements that are expressed as percentages, the percentage for CLEC shall not exceed ILEC percentage plus the applicable critical Z-value. If the CLEC's performance is outside the ILEC percentage plus the critical Z-value and it is the second consecutive month, SWBT can utilize the Z-test as applicable for sample sizes 30 or greater or the permutation test to provide evidence of parity. If SWBT uses the Z-test for samples under 30, the CLEC can independently perform the permutation test to validate SWBT's results.

Alternative 2:

Permutation analysis will be applied to calculate the z-statistic using the following logic:

- 1. Choose a sufficiently large number T.
- 2. Pool and mix the CLEC and ILEC data sets
- 3. Randomly subdivide the pooled data sets into two pools, one the same size as the original CLEC data set (n_{CLEC}) and one reflecting the remaining data points, (which is equal to the size of the original ILEC data set or n_{ILEC}).
- 4. Compute and store the Z-test score (Z_S) for this sample.
- 5. Repeat steps 3 and 4 for the remaining T-1 sample pairs to be analyzed. (If the number of possibilities is less than 1 million, include a programmatic check to prevent drawing the same pair of samples more than once).
- 6. Order the Z_S results computed and stored in step 4 from lowest to highest.
- 7. Compute the Z-test score for the original two data sets and find its rank in the ordering determined in step 6.
- 8. Repeat the steps 2-7 ten times and combine the results to determine P = (Summation of ranks in each of the 10 runs divided by 10T)
- 9. Using a cumulative standard normal distribution table, find the value Z_A such that the probability (or cumulative area under the standard normal curve) is equal to P calculated in step 8.
- 10. Compare Z_A with the desired critical value as determined from the critical Z table. If $Z_A >$ the designated critical Z-value in the table, then the performance is non-compliant.

SWBT and the CLECs jointly will provide software and technical support as needed by Commission Staff for purposes of utilizing the permutation analysis.

Overview of Enforcement Structure

SWBT agrees with the following methodology for developing the liquidated damages and penalty assessment structure for tier-1 liquidated damages and tier-2 assessments:

Liquidated Damages payable to the CLEC should be available as self-executing damages as a part of a contractual obligation. Liquidated damages apply to Tier-1 measurements identified as High, Medium, or Low on Schedule-2.

Assessments are applicable to Tier-2 measures identified as High, Medium, or Low on Schedule-2 and are payable to the Texas State Treasury.

Procedural Safeguards and Exclusions

SWBT agrees that the application of the assessments and damages provided for herein is not intended to foreclose other noncontractual legal and regulatory claims and remedies that may be available to a CLEC. By incorporating these liquidated damages terms into an interconnection agreement, SWBT and CLEC agree that proof of damages from any "noncompliant" performance measure would be difficult to ascertain and, therefore, liquidated damages are a reasonable approximation of any contractual damage resulting from a non-compliant performance measure. SWBT and CLEC further agree that liquidated damages payable under this provision are not intended to be a penalty.

SWBT's agreement to implement these enforcement terms, and specifically its agreement to pay any "liquidated damages" or "assessments" hereunder, will not be considered as an admission against interest or an admission of liability in any legal, regulatory, or other proceeding relating to the same performance. The Proposed Interconnection Agreement will contain language whereby SWBT and the CLEC(s) agree that the CLEC(s) may not use: (1) the existence of this enforcement plan; or (2) SWBT's payment of Tier-1 "liquidated damages" or Tier-2 "assessments" as evidence that SWBT has discriminated in the provision of any facilities or services under Sections 251 or 252, or has violated any state or federal law or regulation. SWBT's conduct underlying its performance measures, and the performance data provided under the performance measures, however, are not made inadmissible by these terms. Any CLEC accepting this performance remedy

plan agrees that SWBT's performance with respect to this remedy plan may not be used as an admission of liability or culpability for a violation of any state or federal law or regulation. Further, any liquidated damages payment by SWBT under these provisions is not hereby made inadmissible in any proceeding relating to the same conduct where SWBT seeks to offset the payment against any other damages a CLEC might recover; whether or not the nature of damages sought by the CLEC is such that an offset is appropriate will be determined in the related proceeding. The terms of this paragraph do not apply to any proceeding before the Commission or the FCC to determine whether SWBT has met or continues to meet the requirements of section 271 of the Act.

SWBT shall not be liable for both Tier-2 "assessments" and any other assessments or sanctions under PURA or the Commission's service quality rules relating to the same performance.

Every six months, SWBT, CLECs, and Commission representatives will review the performance measures to determine whether measurements should be added, deleted, or modified; whether the applicable benchmark standards should be modified or replaced by parity standards; and whether to move a classification of a measure to High, Medium, Low, Diagnostic, Tier-1 or Tier-2. The criterion for reclassification of a measure shall be whether the actual volume of data points was lesser or greater than anticipated. Criteria for review of performance measures. other than for possible reclassification, shall be whether there exists an omission or failure to capture intended performance, and whether there is duplication of another measurement. Performance measures for 911 may be examined at any six month review to determine whether they should be reclassified. The first sixmonth period will begin when an interconnection agreement including this remedy plan is adopted by a CLEC and approved by the Commission. Any changes to existing performance measures and this remedy plan shall be by mutual agreement of the parties and, if necessary, with respect to new measures and their appropriate classification, by arbitration. The current measurements and benchmarks will be in effect until modified hereunder or expiration of the interconnection agreement.

Exclusions Limited

SWBT shall not be obligated to pay liquidated damages or assessments for noncompliance with a performance measurement if, but only to the extent that, such noncompliance was the result of any of the following: a Force Majeure

event; an act or omission by a CLEC that is contrary to any of its obligations under its interconnection agreement with SWBT or under the Act or Texas law; or non-SWBT problems associated with third-party systems or equipment, which could not have been avoided by SWBT in the exercise of reasonable diligence. Provided, however, the third party exclusion will not be raised more than three times within a calendar year. SWBT will not be excused from payment of liquidated damages or assessments on any other grounds, except by application of the procedural threshold provided for below. Any dispute regarding whether a SWBT performance failure is excused under this paragraph will be resolved with the Commission through a dispute resolution proceeding under Subchapter Q of its Procedural Rules or, if the parties agree, through commercial arbitration with the American Arbitration Association. SWBT will have the burden in any such proceeding to demonstrate that its noncompliance with the performance measurement was excused on one of the grounds set forth in this paragraph.

An overall cap of \$ 120 million per year for Tier-1 liquidated damages and Tier-2 Assessments is appropriate. However, whenever SWBT Tier-1 payments to an individual CLEC in a month exceed \$ 3 million, or for all CLECs Tier-1 payments (in a month) exceed \$ 10 million then SWBT may commence a show cause proceeding as provided for below. Upon timely commencement of the show cause proceeding. SWBT must pay the balance of damages owed in excess of the threshold amount into escrow, to be held by a third party pending the outcome of the show cause proceeding. To invoke these escrow provisions, SWBT must file with the Commission, not later than the due date of the affected damages payments, an application to show cause why it should not be required to pay any SWBT's application will be amount in excess of the procedural threshold. processed in an expedited manner under Subchapter O of the Commission's Procedural Rules. SWBT will have the burden of proof to demonstrate why, under the circumstances, it would be unjust to require it to pay liquidated damages in excess of the applicable threshold amount. If SWBT reports non-compliant performance to a CLEC for three consecutive months on 20% or more of the measures reported to the CLEC, but SWBT has incurred no more than \$ 1 million in liquidated damages obligations to the CLEC for that period under the enforcement terms set out here, then the CLEC may commence an expedited dispute resolution under this paragraph pursuant to Subchapter Q of the Commission's Procedural Rules. In any such proceeding the CLEC will have the burden of proof to demonstrate why, under the circumstances, justice requires

SWBT to pay damages in excess of the amount calculated under these enforcement terms.

With respect to any interconnection agreement, SWBT and any CLEC may request two expedited dispute resolution proceedings pursuant to the two preceding paragraphs before the Commission or, if the parties agree, through commercial arbitration with the American Arbitration Association (AAA); during the term of the contract without having to pay attorneys fees to the winning company; for the third proceeding and thereafter, the requesting party must pay attorneys fees, as determined by the Commission or AAA, if that party loses.

In the event the aggregate amount of Tier-1 damages and Tier-2 assessments reach the \$120 million cap within a year and SWBT continues to deliver non-compliant performance during the same year to any CLEC or all CLECs, the Commission may recommend to the FCC that SWBT should cease offering in-region interLATA services to new customers.

Tier-1 Damages:

Tier-1 liquidated damages apply to measures designated in Attachment-1 as High, Medium, or Low when SWBT delivers "non-compliant" performance as defined above.

Under the damages for Tier-1 measures, the number of measures that may be classified as "non-compliant" before a liquidated damage is applicable is limited to the K values shown below. The applicable K value is determined based upon the total number of measures with a sample size of 10 or greater that are required to be reported to a CLEC where a sufficient number of observations exist in the month to permit parity conclusions regarding a compliant or non-compliant condition. For any performance measurement, each disaggregated category for which there are a minimum of 10 data points constitutes one "measure" for purposes of calculating K value. The designated K value and the critical Z-value seek to balance random variation, Type-1 and Type-2 errors. Type-1 error is the mistake of charging an ILEC with a violation when it may not be acting in a discriminatory manner (that is, providing non-compliant performance). Type-2 error is the mistake of not identifying a violation when the ILEC is providing discriminatory or non-compliant performance.

Liquidated damages in the amount specified in the table below apply to all "non-compliant" measures in excess of the applicable "K" number of exempt measures. Liquidated damages apply on a per occurrence basis, using the amount per occurrence taken from the table below, based on the designation of the measure as High, Medium, or Low in Schedule-2 and the number of consecutive months for which SWBT has reported noncompliance for the measure. For those measures listed on Schedule-3 as "Measurements that are subject to per occurrence damages or assessments with a cap," the amount of liquidated damages in a single month shall not exceed the amount listed in the table below for the "Per measurement" category. For those measures listed on Schedule-3 as "Measurements that are subject to per measure damages or assessment," liquidated damages will apply on a per measure basis, at the amounts set forth in the table below. The methodology for determining the order of exclusion, and the number of occurrences is addressed in "Methods of calculating the liquidated damages and penalty amounts," below.

LIQUIDATED DAMAGES TABLE FOR TIER-1 MEASURES

Per occurrence						
Measurement	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Group						
High	\$150	\$250	\$500	\$600	\$700	\$800
Medium	\$75	\$150	\$300	\$400	\$500	\$600
Low	\$25	\$50	\$100	\$200	\$300	\$400

Per Measure/Cap						
Measurement	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Group						
High	\$25,000	\$50,000	\$75,000	\$100,000	\$125,000	\$150,000
Medium	\$10,000	\$20,000	\$30,000	\$40,000	\$50,000	\$60,000
Low	\$5,000	\$10,000	\$15,000	\$20,000	\$25,000	\$30,000

ASSESSMENT TABLE FOR TIER-2 MEASURES

Per occurrence

Measurement	
Group	
High	\$500

Medium	\$300
Low	\$200

Per Measure/Cap

Measurement Group	
High	\$75,000
Medium	\$30,000
Low	\$20,000

Tier-2 Assessments to the State:

Assessments payable to the Texas State Treasury apply to the Tier-2 measures designated on Schedule-2 as High, Medium, or Low when SWBT performance is out of parity or does not meet the benchmarks for the aggregate of all CLEC data. Specifically, if the Z-test value is greater than the Critical Z, the performance for the reporting category is out of parity or below standard.

For those Measurements where a per occurrence assessment applies, an assessment as specified in the Assessment Table; for each occurrence is payable to the Texas State Treasury for each measure that exceeds the Critical Z-value, shown in the table below, for three consecutive months. For those Measurements listed in Schedule-3 as measurements subject to per occurrence with a cap, an assessment as shown in the Assessment Table above for each occurrence with the applicable cap is payable to the Texas State Treasury for each measure that exceeds the Critical Z-value, shown in the table below, for three consecutive months. For those Tier-2 Measurements listed in Schedule-3 as subject to a per measurement assessment an assessment amount as shown in the Assessment Table above is payable to the Texas State Treasury for each measure that exceeds the Critical Z-value, shown in the table below, for three consecutive months.

The following table will be used for determining the Critical Z-value for each measure, as well as the K values referred to below based on the total number of measures that are applicable to a CLEC in a particular month. The table can be extended to include CLECs with fewer performance measures.

Critical Z - Statistic Table

Number of	K Values	Critical Z-value
Numberor	N values	Cittical Z-value

Schedule-1 Performance Remedy Plan

Performance		
Measures		
10-19	1	1.79
20-29	2	1.73
30-39	3	1.68
40-49	3	1.81
50-59	4	1.75
60-69	5	1.7
70 -79	6	1.68
80 - 89	6	1.74
90 - 99	7	1.71
100 - 109	8	1.68
110 -119	9	1.7
120 - 139	10	1.72
140 - 159	12	1.68
160 - 179	13	1.69
180 - 199	14	1.7
200 - 249	17	1.7
250 - 299	20	1.7
300 - 399	26	1.7
400 - 499	32	1.7
500 - 599	38	1.72
600 - 699	44	1.72
700 - 799	49	1.73
800 - 899	55	1.75
900 - 999	60	1.77
1000 and above	Calculated for	Calculated for
	Type-1 Error Probability of 5%	Type-1 Error Probability of 5%

General Assessments:

If SWBT fails to submit performance reports by the 20th day of the month, the following assessments apply unless excused for good cause by the Commission:

If no reports are filed, \$5,000 per day past due;

If incomplete reports are filed, \$1,000 per day for each missing performance results.

If SWBT alters previously reported data to a CLEC, and after discussions with SWBT the CLEC disputes such alterations, then the CLEC may ask the Commission to review the submissions and the Commission may take appropriate action. This does not apply to the limitation stated under the section titled "Exclusions Limited."

When SWBT performance creates an obligation to pay liquidated damages to a CLEC or an assessment to the State under the terms set forth herein, SWBT shall make payment in the required amount on or before the 30th day following the due date of the performance measurement report for the month in which the obligation arose (e.g., if SWBT performance through March is such that SWBT owes liquidated damages to CLECs for March performance, or assessments to the State for January – March performance, then those payments will be due May 15, 30 days after the April 15 due date for reporting March data). For each day after the due date that SWBT fails to pay the required amount, SWBT will pay interest to the CLEC at the maximum rate permitted by law for a past due liquidated damages obligation and will pay an additional \$3,000 per day to the Texas State Treasury for a past due assessment.

SWBT may not withhold payment of liquidated damages to a CLEC, for any amount up to \$3,000,000 a month, unless SWBT had commenced an expedited dispute resolution proceeding on or before the payment due date, asserting one of the three permitted grounds for excusing a damages payment below the procedural threshold (Force Majeure, CLEC fault, and non-SWBT problems associated with third-party systems or equipment). In order to invoke the procedural threshold provisions allowing for escrow of damages obligations in excess of \$3,000,000 to a single CLEC (or \$10,000,000 to all CLECs), SWBT must pay the threshold amount to the CLEC(s), pay the balance into escrow, and commence the show cause proceeding on or before the payment due date.

Methods of Calculating the Liquidated Damage and Assessment Amounts

The following methods apply in calculating per occurrence liquidated damage and assessments:

Tier-1 Liquidated Damages

Application of K Value Exclusions